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SYMONS Magnesium WALL FORMS

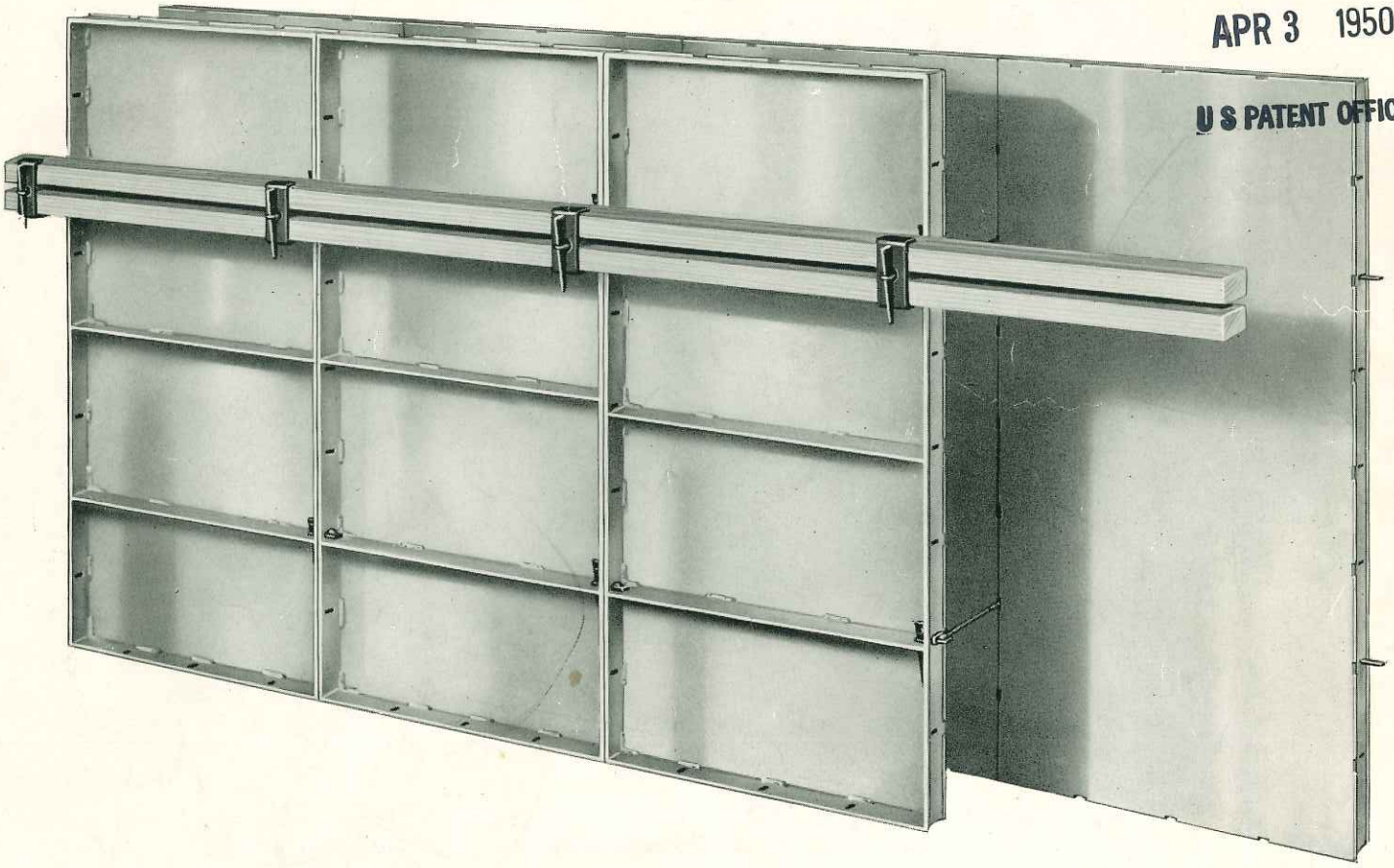
249/189 7700

LIBRARY

CONCRETE EASILY PULLS AWAY FROM THIS NEW LIGHT METAL

APR 3 1950

U S PATENT OFFICE



Exclusive Features

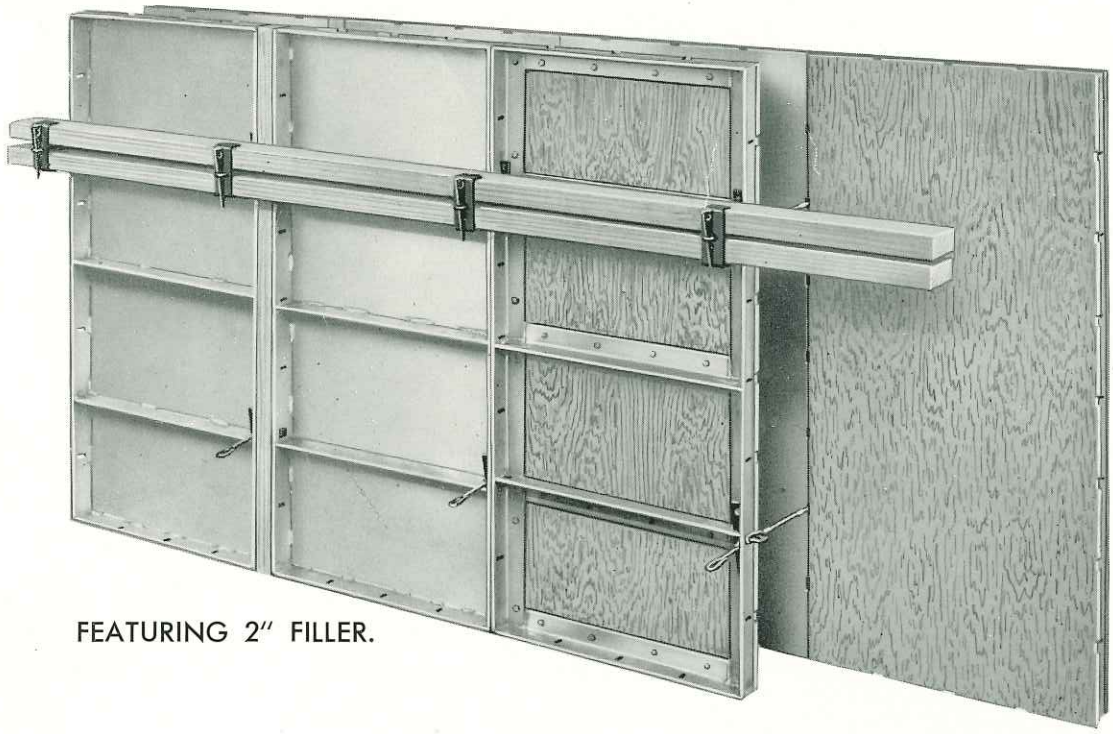
- ✓ **Weight of panel is less than three pounds per square foot**
- ✓ **Does not swell when wet, or contract when dry**
- ✓ **Does not rust**
- ✓ **Precision made, automatically accurate**
- ✓ **Forms match up with blue print right on the line**
- ✓ **Facing 3/16" thick — no waves or dents**
- ✓ **Rents at same price as plywood forms**

The Symons Clamp & Mfg. Company has been making lumber and plywood forms for many years. The Symons System is well established all over this country and in Canada. We shall always make wall forms out of these materials, for the cost is much less than the cost of magnesium. However, for one who specializes in foundation building Magnesium Forms will prove cheaper. They will last longer. They go up faster, and do a better and more satisfactory job.

SYMONS CLAMP & MANUFACTURING COMPANY

4249 DIVERSEY AVENUE • Phone Dickens 2-5141 • CHICAGO 39, ILLINOIS

SYMONS NEW MAGNESIUM FORMS ARE RENTED WITH 90-DAY PURCHASE OPTION. 3 MONTHS' PAID RENTALS APPLY ON PURCHASE. RENTAL PRICE SAME AS FOR PLYWOOD PANELS.



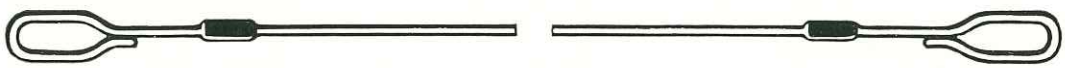
FEATURING 2" FILLER.

2" fillers are made from a piece of 2 x 4 lumber cut 2½" wide. 1" fillers are made from 1" boards cut 2½" wide. Are used to meet dimensions; also as vertical liners.

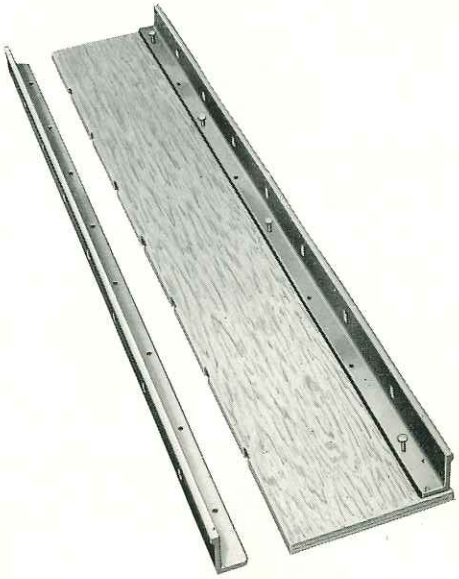
Plywood faced panels and fillers with magnesium frames are interchangeable with the "all magnesium" panels, and may be inserted when and as often as needed, providing nailing surface for attaching boxes, frames, sleeves, etc.

Walers are used for alignment only, and are put on after one side of wall has been erected. Usually one waler near top on one side is sufficient.

Slip waler ties over connecting bolt before putting in tightening wedge.



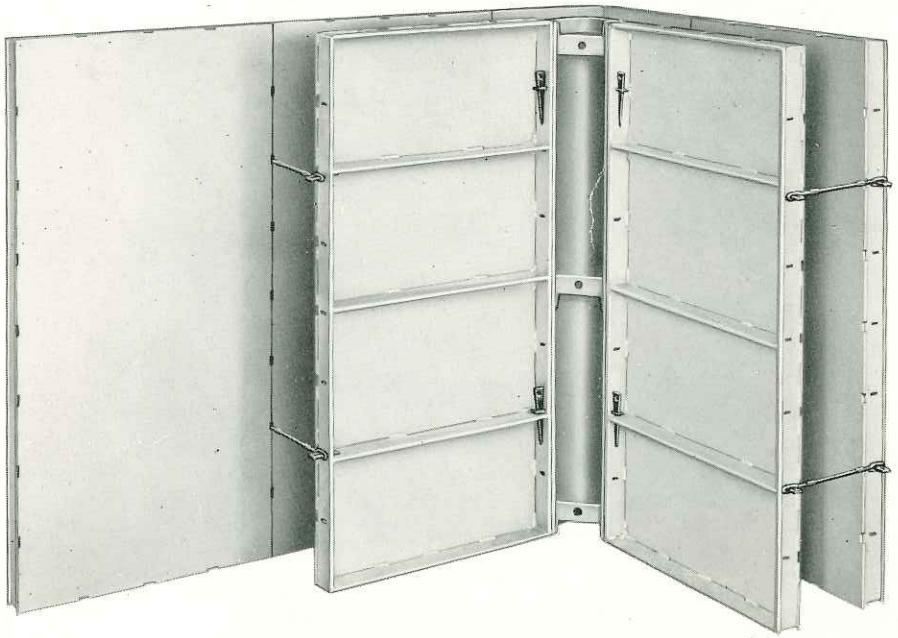
NO WAITING AROUND FOR MISSING FILLER. EASILY AND QUICKLY MADE ON JOB.



FILLERS NOT OVER 14" IN WIDTH MAY BE MADE ON THE JOB, WITH ANGLES, PLYWOOD, AND SPLIT RIVETS FURNISHED FOR THAT PURPOSE.

3/13/50 - Eight-Symons Clamp & Mfg. Co.

SYMONS MAGNESIUM FORMS RENT FOR SAME PRICE PER SQUARE FOOT AS PLYWOOD FORMS. ARE INFINITELY BETTER AND FASTER. REASON FOR LOW PRICE — THEY COME BACK SAME AS THEY GO OUT — LOW DEPRECIATION.



Featuring Inside Corner

All corners require inside and outside corner pieces, Figs. 1 and 2. The inside corner piece is 6" wide each way. Hence, the dimension to be filled in on opposite side is always the wall thickness, plus 6".

In setting up the inside corner, you first attach two standard panels to the corner piece, Fig. 1, passing the connecting bolts through the loops in the ties. Next, you put up the outside corner as per photo on the following page.

Fig. 1
Inside Corner

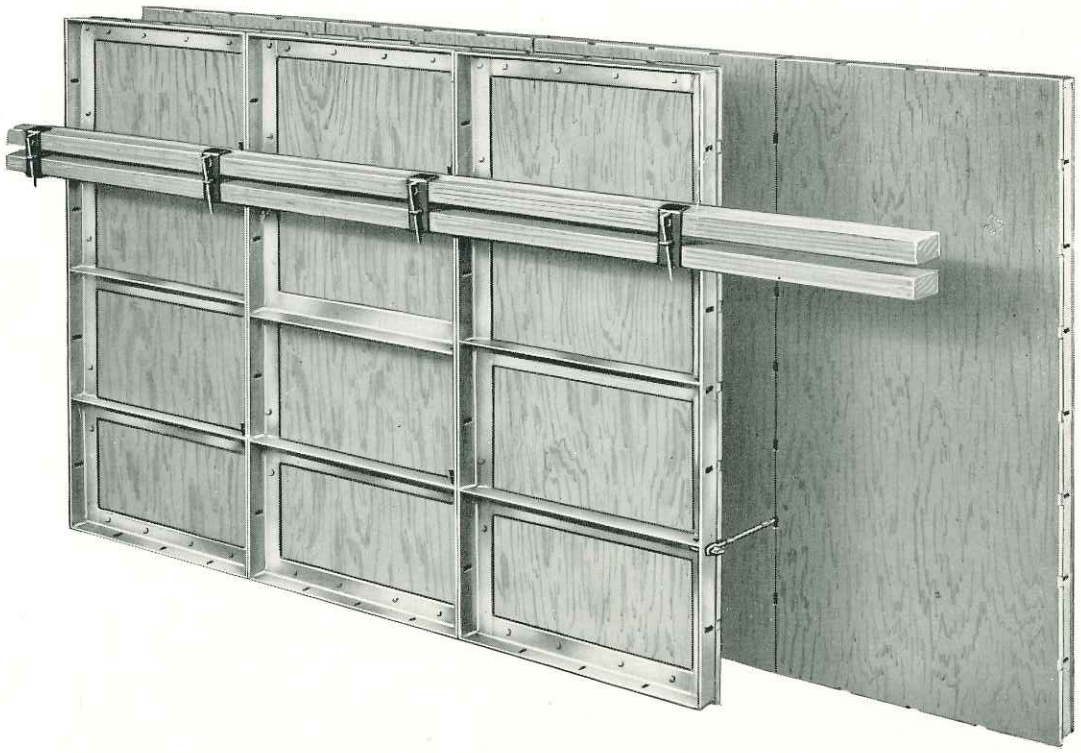
Featuring Outside Corner

In the above photo, the wall thickness is 10". Accordingly, a 16" filler is required on each side of the outside corner piece, Fig. 2. If you do not have 16" fillers, you may use two 8" fillers, or a 10" plus a 6" filler, or else make two fillers on the job, as per page 3.

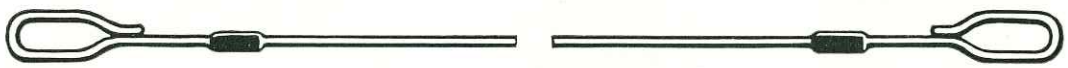
Having set these fillers in place, the panels on both sides of the wall now match with each other and you proceed toward the center. The waler ties, if a waler is to be installed, are slipped over the connecting bolts as the bolts are put in place. However, the waler is not put up until one side of wall is erected.

Fig. 2
Outside Corner

PLYWOOD FACED PANELS WITH MAGNESIUM FRAMES WEIGH 2¾ LBS. PER SQUARE FOOT. THE SPLIT RIVETS USED IN FASTENING THE PLYWOOD TO THE FRAME ARE EASILY DRAWN WITH CLAW HAMMER AND FACING REVERSED, OR NEW PLYWOOD INSTALLED.



There are other plywood faced panels, but none that use a round tie with easy breakback, or so far as we know, none that use a magnesium frame, a very light metal to which concrete will not easily adhere and that weighs less than 1/3 as much as steel.



Symons Form or Wall Tie

A round tie has a decided advantage in the breakback feature. In the Symons tie, you have only to run one of the wedges through the loop in the end, give a half turn, and tie snaps at point of greatest resistance, which is the beginning of the flat part in the tie.

IN ORDERING TIES, WALL THICKNESS ONLY IS REQUIRED.

DO NOT BREAK OFF TIES UNTIL THE SECOND DAY AFTER POURING.

The Pilaster — Two Methods of Construction

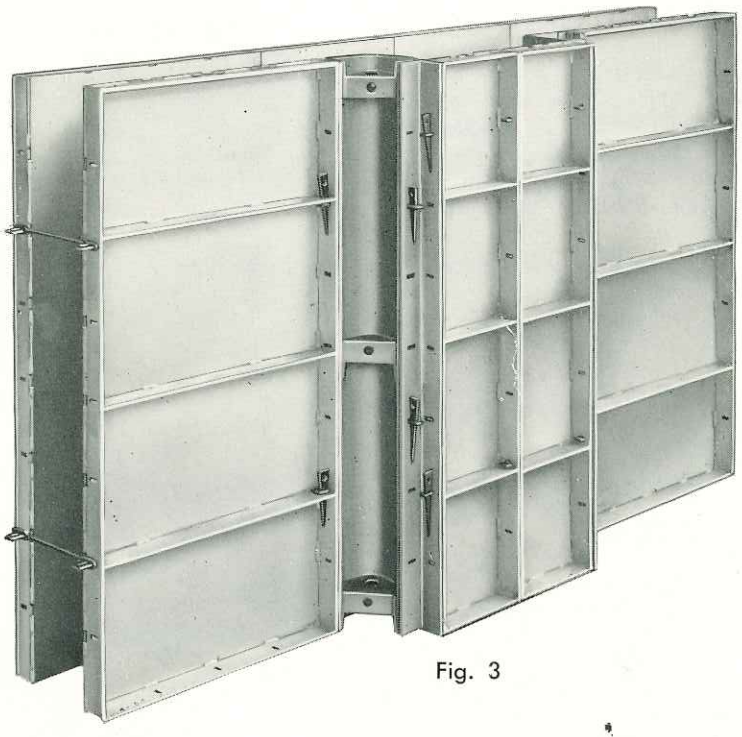


Fig. 3

In the set-up, Fig. 3, there were used in the protruding part of the pilaster 2 inside corner pieces, Fig. 1, Page 4, and 2 outside corners, Fig. 2, Page 5. Also, two 10" fillers (pilaster being 20" wide). Opposite these parts, there were used two 16" fillers (the inside corner pieces being 6" wide, plus a 10" filler, making 16" to center, 32" total).

For variation in width you would, of course, use different size fillers.

If the pilaster protrudes more than 6" from wall, you insert fillers of suitable width. If pilaster protrudes less than 6" from wall, make bulkhead of required thickness and insert back of the 10" fillers.

In the set-up, Fig. 4, there were used 2 inside corner pieces and 2 outside corner pieces in the same way as in Fig. 3, making 12". Also used were one 16" filler and two 2" fillers as shown, 20"; total 32". Opposite these parts were used two 8" fillers and one 16" filler (32" total). The 8" fillers used match with the inside corner pieces which are 6" wide, plus the 2" filler, making 8"; total 32".

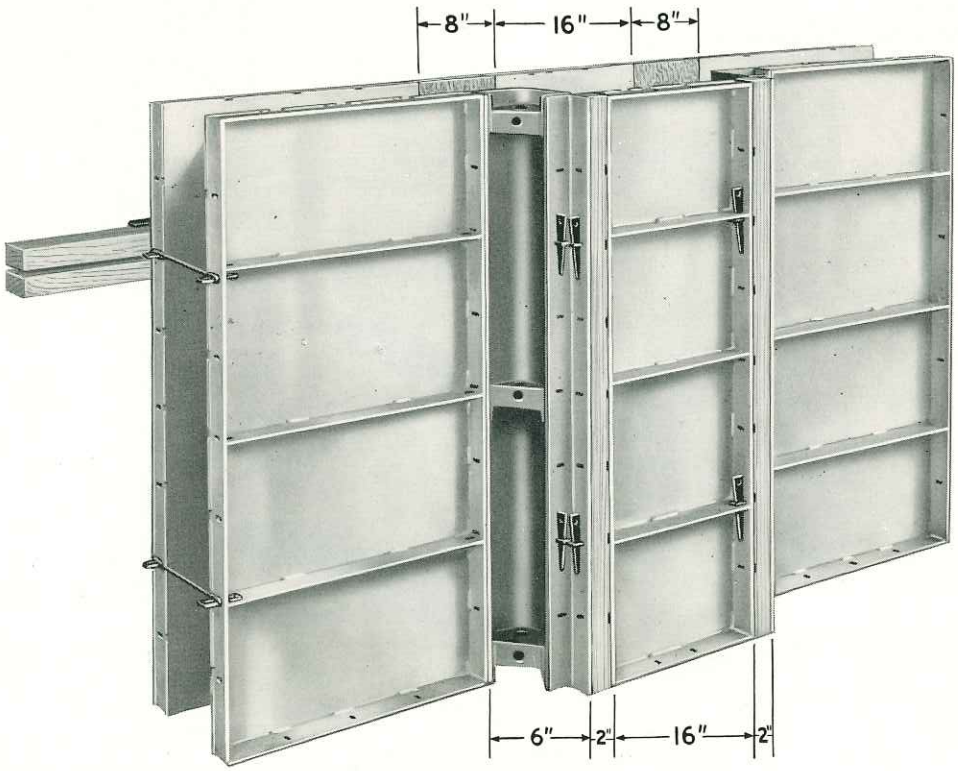


Fig. 4

SYMONS MAGNESIUM PRECISION WALL FORMS

make a concrete wall that requires no rubbing, nor plastering. Magnesium one-piece facing 3/16" thick leaves no waves, nor dents. Panel forms weigh less than 3 pounds per square foot. Concrete does not easily adhere to magnesium. Are quickly and easily cleaned. Are not affected by weather conditions. Do not swell with moisture, nor contract when dry. Do not rust. Will last a lifetime. Are rented at the same price as plywood forms. 90-day purchase option. 3 months' paid rentals apply on purchase.

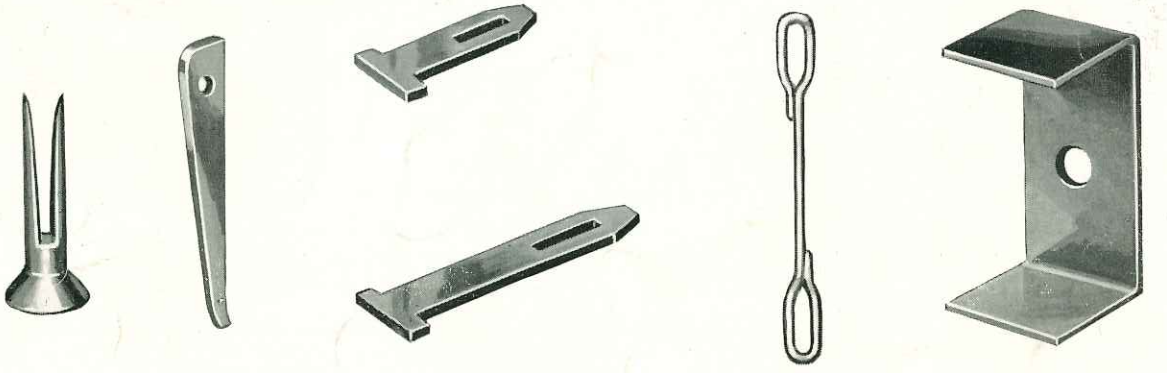
No guess work in setting up. Are precision-made, automatically accurate. Have high carbon round ties with easy breakback.

GENERAL DIRECTIONS FOR SETTING UP

Before proceeding, determine from layout just what is required in the way of panels, fillers, and corner pieces. Make sure that every part needed is on the job. This is very important and will save delays, speed the job and lower the cost.

1. Oil the faceings with any thin paraffin oil.
2. Erect corner panels as per instructions on pages 4 and 5. Plumb and brace. From the corners, work toward the center, running the connecting bolts through loop ends of ties.
3. While forms are being erected, make chalk mark on footings where boxes, frames, inserts, etc., are to be installed. At these locations, insert a plywood faced panel that has been ordered for this purpose. The plywood provides nailing surface for these parts. The plywood panels are interchangeable with magnesium panels.
4. Walers are used for alignment only; one near top of one side is usually all that is needed. The waler tie is slipped over connecting bolt before driving in wedge; however, wales are not put on until one side is up.
5. After reinforcing steel has been placed, and frames, boxes, inserts, sleeves, etc., have been installed to the one face of the wall forms, erect the opposite face of the wall.

SHORT CONNECTING BOLT



SPLIT RIVET
Actual Size

TIGHTENING WEDGE

LONG CONNECTING BOLT
Used only with 2" fillers

LINER OR WALE TIE

LINER OR WALE U PLATE